

Atty. Dkt. No. 1-004 AMENDMENT

Appl. No. 10/623,340
PRELIMINARY AMENDMENT PURSUANT TO RCE

Listing of Claims:

What is claimed is:

Please cancel Claims 1- 10, and 22-26 without prejudice.

Claims 1- 10 (Canceled).

11. (Currently Amended). A method of formatting audio and video information on a compact disc and reproducing the audio and video information using a portable device having an information processor coupled to an audio interface, a video interface, and a light emitting diode data acquisition sub-assembly for reading information from the compact disc, the video information having a video frame rate and the audio information having a sampled audio throughput for a single frame of video, the method comprising:

combining a number of video pixels per sample, thereby generating a reduced sample-per-frame number;

allocating a portion of available samples, determined from a comparison between the sampled audio throughput and the reduced sample-per-frame number, as a frame start portion and a frame end portion;

formatting the frame start portion and the frame end portion;

recording the video information as non-compressed video on a first channel and the audio information on a second channel, the video and audio information being recorded as a modulated signal;

acquiring the video and audio information by the light emitting diode data acquisition sub-assembly;

processing the video and audio information in the information processor such that video information is provided to the video interface and audio information is provided to the audio interface; and

reproducing the video and audio information;

Atty. Dkt. No. 1-004 AMENDMENT

Appl. No. 10/623,340
PRELIMINARY AMENDMENT PURSUANT TO RCE

wherein the first and second channels are respective left and right audio channels associated with the compact disc, and the video and audio information are time-synchronized.

12. (Original). The method of claim 11, wherein acquiring the video and audio information includes clockwise rotation of the compact disc by the light emitting diode data acquisition sub-assembly.

13. (Original). The method of claim 11, wherein acquiring the video and audio information includes counterclockwise rotation of the compact disc by the light emitting diode data acquisition sub-assembly.

14. (Original). The method of claim 11, further comprising a security check to determine if the compact disc is of proper size.

15. (Original). The method of claim 11, further comprising a security check to determine if the compact disc is properly formatted.

16. (Original). The method of claim 11, wherein the compact disc is a compact disc digital audio and the modulated signal comprises audio data stored thereon.

17. (Original). The method of claim 11, wherein the compact disc is approximately 85 mm in diameter.

18. (Currently Amended). A system for reproducing audio and video information, the system comprising:

a recorder for associating non-compressed video and audio information with respective first and second channels formatted for recordation onto a compact disc;

a portable device for reproducing data stored on a compact disc, the device comprising:

Atty. Dkt. No. 1-004 AMENDMENT

Appl. No. 10/623,340

PRELIMINARY AMENDMENT PURSUANT TO RCE

a housing for receiving a compact disc;

a video interface for acquiring the non-compressed video information from a first channel of the compact disc, the non-compressed video information having a video frame rate, with video frames formatted at frame start and frame end portions;

an audio interface for acquiring audio information from a second channel of the compact disc, the video and audio information being recorded as a modulated signal, said audio information having a sampled audio throughput for a single frame of non-compressed video combined as a number of video pixels per sample in a reduced sample-per-frame number;

a light emitting diode data acquisition sub-assembly operable with the video interface and audio interface from the modulated signal information where the first and second channels each correspond to one of left and right audio channels associated with the compact disc for reading information from the compact disc;

an information processor coupled to the video interface, the audio interface, and the light emitting diode data acquisition sub-assembly reproducing the video and audio information from the modulated signal information from the left and right audio channels, the video and audio information being acquired according to the sampled audio throughput with the number of video pixels per sample according to the reduced sample-per-frame number; and

a display unit in communication with the video interface for displaying video information generated by the information processor;

wherein the information processor receives interlaced and time-synchronized audio and non-compressed video signals from the data acquisition sub-assembly, the audio and video signals being derived from first and second channels on the compact disc, and the video signal having one or more frame markers to allow for video reproduction.

19. (Original). The device of claim 18, wherein the modulated signal is processed by the information processor into respective audio and video signals.

Atty. Dkt. No. 1-004 AMENDMENT

Appl. No. 10/623,340
PRELIMINARY AMENDMENT PURSUANT TO RCE

20. The device of claim 18, wherein the modulated signal comprises interleaved video and audio information.

21. (Original). The device of claim 18, wherein the compact disc is a compact disc digital audio and the modulated signal comprises audio data stored thereon.

Claims 22- 26 (Canceled).

27. (Original). The device of claim 18, wherein the display unit is in the housing and operable to display bit map information.

28. (Original). The device of claim 18, wherein the display unit is a liquid crystal display.

29. (Currently Amended). A system for reproducing audio and video information, the system comprising:

 a recorder for associating non-compressed video and audio information with respective first and second channels formatted for recordation onto a compact disc;

 a portable device operable to receive the compact disc and including:

 a housing for receiving a compact disc and having:

 an upper portion;

 a lid coupled to the upper portion;

 a lower portion;

 wherein the lid is coupled to the upper portion at a pivot point such that the lid pivots between an open position and a closed position;

 a video interface for acquiring non-compressed video information from a first channel of the compact disc, the non-compressed video information having a video frame rate, with video frames formatted at frame start and frame end portions;

Atty. Dkt. No. 1-004 AMENDMENT

Appl. No. 10/623,340
PRELIMINARY AMENDMENT PURSUANT TO RCE

an audio interface for acquiring audio information from a second channel of the compact disc, the video and audio information being recorded as a modulated signal, said audio information having a sampled audio throughput for a single frame of non-compressed video combined as a number of video pixels per sample in a reduced sample-per-frame number;

a light emitting diode data acquisition sub-assembly operable with the video interface and audio interface from the modulated signal information where the first and second channels each correspond to one of left and right audio channels associated with the compact disc for reading information from the compact disc;

an information processor coupled to the video interface, the audio interface, and the light emitting diode data acquisition sub-assembly reproducing the video and audio information from the modulated signal information from the left and right audio channels, the video and audio information being acquired according to the sampled audio throughput with the number of video pixels per sample according to the reduced sample-per-frame number; and

a display unit in communication with the video interface for displaying video information provided from the information processor;

wherein the information processor receives interlaced and time-synchronized audio and video signals from the data acquisition sub-assembly, the audio and non-compressed video signals being derived from first and second channels on the compact disc, and the video signal having one or more frame markers to allow for video reproduction.

30. (Original). The system of claim 29, wherein the lid pivots about an axis that is parallel to an axis of compact disc rotation.

31. (Original). The system of claim 29, wherein the lid pivots about an axis that is perpendicular to an axis of compact disc rotation.

Atty. Dkt. No. 1-004 AMENDMENT

Appl. No. 10/623,340
PRELIMINARY AMENDMENT PURSUANT TO RCE

32. (Original). The system of claim 29, wherein the compact disc is approximately 85 mm in diameter.

33. (Original). The system of claim 29, wherein the display unit is a liquid crystal display.

Please add new Claims 34-48, as follows:

34. (New). A portable device for reproducing information stored on a compact disc, the device comprising:

- a housing for receiving the compact disc;
- a video interface for acquiring non-compressed bit map video information from a first channel of the compact disc, the video information having a video frame rate, with video frames formatted at frame start and frame end portions;
- an audio interface for acquiring audio information from a second channel of the compact disc, the video and audio information being recorded as a modulated signal, said audio information having a sampled audio throughput for a single frame of the bit map video information combined as a number of video pixels per sample in a reduced sample-per-frame number;
- a light emitting diode data acquisition sub-assembly operable with the video interface and audio interface from the modulated signal information where the first and second channels each correspond to one of left and right audio channels associated with the compact disc for reading information from the compact disc;
- an information processor coupled to the video interface, the audio interface, and the light emitting diode data acquisition sub-assembly reproducing the video and audio information from the modulated signal information from the left and right audio channels, the video and audio information being acquired according to the sampled audio throughput with the number of video pixels per sample according to the reduced sample-per-frame number; and

Atty. Dkt. No. 1-004 AMENDMENT

Appl. No. 10/623,340
PRELIMINARY AMENDMENT PURSUANT TO RCE

a display unit in communication with the video interface for displaying video information provided from the information processor;

wherein the information processor receives a time-synchronized modulated signal from the data acquisition sub-assembly providing an audio signal and a video signal derived into a first channel and a second channel from the compact disc, the video signal having one or more frame markers to allow for video reproduction from the modulated signal.

35. (New). The device of claim 34, wherein the modulated signal is processed by the information processor into respective audio and video signals.

36. (New). The device of claim 34, wherein the modulated signal comprises interleaved video and audio information.

37. (New). The device of claim 34, wherein the compact disc is a compact disc digital audio and the modulated signal comprises audio data stored thereon.

38. (New). The device of claim 34, wherein the light emitting diode data acquisition subassembly rotates the compact disc clockwise.

39. (New). The device of claim 34, wherein the audio interface comprises an amplifier and a filter.

40. (New). The device of claim 34, wherein the audio interface is coupled to a speaker in the housing.

41. (New). The device of claim 34, wherein the display unit is in the housing and operable to display bit map information.

42. (New). The device of claim 34, wherein the display unit is a liquid crystal display.

Atty. Dkt. No. 1-004 AMENDMENT

Appl. No. 10/623,340
PRELIMINARY AMENDMENT PURSUANT TO RCE

43. (New). The device of claim 34, wherein the compact disc is approximately 85 mm in diameter.

44. (New). The device of claim 34, further comprising:

a recorder for associating the non-compressed video and the audio information with respective first and second channels formatted for recordation onto the compact disc; and

wherein the information processor of the portable device for reproducing information stored on the compact disc receives interlaced and time-synchronized audio and non-compressed video signals from the data acquisition sub-assembly, the audio and video signals being derived from first and second channels on the compact disc, and the video signal having one or more frame markers to allow for video reproduction.

45. (New). The device of claim 34, wherein the video information and the audio information from the video interface and audio interface respectively comprise compact disc digital audio (CD-DA) modulated signals, each formatted from one of the stereo channels of the CD-DA with the bit map video information being stored on one audio channel and the audio information being stored on the other stereo channel with the first and second channels being time-synchronized.

46. (New). The device of claim 34, wherein the video information and the audio information from the video interface and audio interface respectively comprise compact disc digital audio (CD-DA) modulated signals, each formatted from one of the stereo channels of the CD-DA with the bit map video information being stored on one audio channel and the audio information being stored as pulse code modulated (PCM) mono audio information interlaced on the other stereo channel with the first and second channels being time-synchronized.

Atty. Dkt. No. 1-004 AMENDMENT

Appl. No. 10/623,340

PRELIMINARY AMENDMENT PURSUANT TO RCE

47. (New). The method of claim 11, wherein each of the video and audio information being recorded as modulated signals respectively comprise compact disc digital audio (CD-DA) modulated signals, each formatted from one of the stereo channels of the CD-DA with the bit map video information being stored on one audio channel and the audio information being stored on the other stereo channel with the first and second channels being time-synchronized.

48. (New). The method of claim 11, wherein each of the video and audio information being recorded as modulated signals respectively comprise compact disc digital audio (CD-DA) modulated signals, each formatted from one of the stereo channels of the CD-DA with the bit map video information being stored on one audio channel and the audio information being stored as pulse code modulated (PCM) mono audio information interlaced on the other stereo channel with the first and second channels being time-synchronized.